

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method for controlling a microcomputer in a microcomputer system with a high speed operation mode and a low speed operation mode in which the low speed operation mode of the microcomputer is slower than the high speed operation mode, the microcomputer system including a clock operable in the high and the low speed operation modes and a backup power supply for supplying the clock with power for a predetermined time, said method comprising:

detecting a power shutdown;

switching from the high speed operation mode to the low speed operation mode in response to detecting the power shutdown;

determining whether power is recovered within a given time period; and

switching to the high speed operation mode ~~when the power is determined to be recovered~~ in response to determining that the power is recovered within the given time period.[:,:]

wherein the clock measures the given time period in the low speed operation mode.

2. (Canceled)

3. (Previously Presented) The method for controlling a microcomputer according to claim 1, further comprising setting the microcomputer to a stop operation mode to stop operation unless the power is recovered within the given time period.

4. (Previously Presented) The method for controlling a microcomputer according to claim 1, further comprising storing a value representing a time period, which the microcomputer measures during power shutdown, in a volatile memory of the microcomputer system.

5. (Currently Amended) A method for controlling a microcomputer in a microcomputer system with a high speed operation mode and a low speed operation mode in which the low speed operation mode is slower than the high speed operation mode, the microcomputer system including a clock operable in the high and the low speed operation modes and a backup power supply for supplying the clock with power for a predetermined time, said method comprising:

detecting a power shutdown;

switching from the high speed operation mode to the low speed operation mode in response to detecting the power shutdown;

periodically determining whether power is recovered within a first given time period;

switching to the high speed operation mode ~~when the power is determined to be recovered~~ in response to determining that power is recovered within the first given time period; and

setting the microcomputer to a stop operation mode to stop operation of the microcomputer unless the power is recovered within a second given time period which is longer than the first given time period.

6. (Previously Presented) The method for controlling a microcomputer according to claim 5, wherein the second given time period is set to be longer than the first given time period by substantially an integral multiple of the first given time period.

7. (Previously Presented) The method for controlling a microcomputer according to claim 5, further comprising storing a value representing a time period which the microcomputer measures during power shutdown in a volatile memory of the microcomputer system.

8. (Currently Amended) A method for controlling a microcomputer in a microcomputer system with a high speed operation mode and a low speed operation mode in which the low speed operation mode of the microcomputer is slower than the high speed operation mode, said microcomputer system including a clock operable in the high and the low speed operation modes and a backup power supply for supplying the clock with power for a predetermined time, said method comprising:

detecting a power shutdown;  
checking whether the clock is set;  
setting the microcomputer to a stop operation mode to stop an operation of the microcomputer unless the clock is set;  
switching from the high speed operation mode to the low speed operation mode in response to detecting the power shutdown when the clock is set;  
periodically determining whether the power is recovered within a first given time period;  
switching to the high speed operation mode ~~when the power is determined to be recovered~~ in response to determining that the power is recovered within the first given time period; and  
setting the microcomputer to a stop operation mode unless the power is recovered within a second given time period which is longer than the first given time period.

9. (Previously Presented) The method for controlling a microcomputer according to claim 8, further comprising storing a value representing a time period which the microcomputer measures during power shutdown in a volatile memory of the microcomputer system.